Certified Logger

The Certified Master Logger program is a new, voluntary course for loggers which may provide a means



to maintain or improve the competitiveness of the state's logging industry in a global and environmentally conscious marketplace. It is a point-of-harvest certification program.

The loggers must participate in extensive training and make a commitment to abide by the set standards. These standards cover five subject areas: best management practices; local, state and federal laws and regulations; pre-harvest practices; harvest operations; and business viability.

Within each subject area is a set of indicators for which the logging firms are audited by an independent third party to verify their compliance. Firms are audited in 38 specific areas including meeting OSHA regulations, following child labor and transportation laws, and following a written contract or a harvest agreement with the landowner.

Auditors also check to ensure that the land and the trees remaining after harvest are minimally impacted.

FUN

Celebrate your state trees

Does your schoolyard have specimens of Kentucky's officially recognized trees? Since 1994, the official state tree has been the tulip poplar, which is also known as the yellow poplar or tulip tree. But because of petitioning by students from Bethel Elementary in Bath County, the previous official state tree, the Kentucky coffeetree, was redesignated the state heritage tree. Planting both species on your school campus will recognize both the state tree, and in the case of the state heritage tree, the power that even elementary-aged Kentucky students have when they organize and petition the governor.



forest is land decked out in trees; a home for plants and animals; a place for people to live, work, and enjoy; and a source for valuable resources. Most of all, a forest is an interconnected and interdependent community of plants, animals and microscopic beings and soil, minerals and water. Sometimes the saying, "You can't see the forest for the trees," is true. You have to look very carefully at the trees and beyond to see the real forest. For a forest (urban and rural) isn't a forest without soil and water and sunlight and rain. It needs insects and birds to help with pollination and the scattering of seeds. All the trees, shrubs, mosses and mushrooms; birds and animals; spiders, frogs and snakes need each other to survive. They are all interconnected and form a community - or a neighborhood, of sorts.

Trees are a renewable resource.

- In urban areas, the tree species that are planted serve a specific function for the site. Often trees in urban areas are planted for their beauty, screening or shading ability.
- In rural areas, forests generally grow back naturally from seeds or by sprouting from stumps. The species of tree that regenerates is dependent upon the seed source or parent tree present.

Urban and rural forests provide many benefits to their inhabitants. These can be grouped into three categories: social, environmental and economic.

Social Benefits

We like trees around us because they make life more pleasant. Most of us respond to the presence of trees beyond simply observing their four-season appeal. We feel relaxed in a group of trees. We often be-

Benefits of Trees:

URBAN vs. Rural



come personally attached to trees that we have planted. Because of their potential for long life, trees are frequently planted as living memorials to loved ones. A healthy forest growing in places where people live and work is an essential element of the health of people themselves.

- In urban areas, trees contribute to a sense of community pride and ownership. They provide privacy and a sense of solitude and security. Trees have also been proven to shorten hospital stays when patients are placed in rooms with a view of trees and open spaces.
- In rural areas, trees are often noted for their aesthetic characteristics; breathtaking fall coloration of the leaves, spring flowers, green foliage in the summer, and unique bark and tree shape in the winter. And like the urban forests, rural forests also create feelings of relaxation and well being.

Environmental Benefits

Trees in urban and rural areas provide similar environmental benefits. They are capable of altering the environment in which they live by moderating climate, improving air quality, conserving water and sheltering wildlife.

Climate control is obtained by moderating the effects of sun, wind and rain. Heat from the sun is absorbed or deflected by leaves on deciduous trees in the summer and is only filtered by branches of deciduous trees in winter. We are cooler when we stand in the shade of trees and are not exposed to direct sunlight. Generally, the larger the tree the greater the cooling effect. In winter, we value the sun's radiant energy. Because of this, it is beneficial to plant deciduous (leaflosing) trees on the south side of homes and buildings so the heat of the winter sun can provide warmth.

- Wind speed and direction can be affected by trees. more compact the foliage of the tree or group of trees, the greater the influence of the windbreak.
- Trees deflect or absorb falling rain, sleet and hail, providing some protection to the soil as well as to people, pets and buildings. Trees intercept water, store some of it, and reduce storm water runoff and the possibility of flooding.
- Air quality is improved when leaves filter the air we breathe by removing dust and other pollutants.
- Trees provide food, nest sites and shelter for wildlife. Birds and other wildlife are attracted to the more natural areas.

Economic Benefits

The economic benefits of urban and rural trees can be both direct and indirect.

- In urban areas, direct economic benefits are usually associated with energy costs. Air conditioning costs are lower in a tree-shaded home. Heating costs are reduced when a home has a windbreak. Trees increase in value from the time they are planted until they mature. Trees are a wise investment of funds since landscaped homes are 5 to 20 percent more valuable than nonlandscaped homes. The savings in energy costs and the increase in property value directly benefit each homeowner.
- In rural areas, direct economic benefits are usually associated with timber values. The timber value of a forest is dependent



such as Shiitake mushrooms, ginseng, and other herbs and spices.

- In urban areas, the indirect economic benefits of trees are even greater. These are available to the community or region. Customers pay lower electricity bills when power companies are able to use less water in their cooling towers, build fewer new facilities to meet peak demands, use reduced amounts of fossil fuel in their furnaces and need fewer measures to control air pollution. Communities can also save if fewer facilities must be built to control storm water in the region. These savings may seem small to the individual, but these reductions can often save the community thousands of dollars.
- In rural areas, the indirect economic values include tourism dollars, hunting and fishing fees, camping and hiking, and other nonconsumptive activities, such as bird watching and wildlife photography.

We enjoy the beauty of trees, but trees are also valuable in many

practical ways. By using as much of the tree as possible - and by planting new trees - we can be sure that we always will be able to enjoy the benefits that come from this valuable natural resource.

Tree Trivia

The ginkgo tree is a "living fossil." Unlike most other kinds of trees living today, the ginkgo was around during the days of the dinosaurs.

History in A Tree?



Tree rings ("growth rings" or "annual rings") can be seen in a horizontal cross section cut through the trunk of a tree. In general, a tree is marked by a growth ring each year. The width of the ring added to the outside of the tree is in part dependent on the amount of moisture available to the tree. Trees add thin rings during the dry years and thick rings during wet years. Dendrochronology is the method of determining dates and historic information based on analyzing tree-ring growth patterns. This tree tells a 50-year history from the first Arbor Day in 1872 to the opening of Kentenia State Forest in 1919. Can you name any conservation efforts or legislation since that time?

Tree Ring Timeline

1872 - First Arbor Day initiated by J. Sterling Morton of Nebraska City, Nebraska on April 10. Arbor Day is described as the tree planter's holiday.

1875 - American Forests was founded by John Ashton Warder to protect forests from unnecessary waste. The organization is the oldest U.S. conservation group still in operation.

1879 - Division of Forestry established in U.S., later to become U.S. Forest Service.

1891 - Forest Reserve Act passes Congress. Over 17.5 million acres are set aside by 1893, including the Yellowstone Forest Reserve.

1901 - President Teddy Roosevelt's first message to Congress includes strong recommendations for forest and water conservation and reclamation.

1903 - President Teddy Roosevelt creates first National Bird Preserve, the precursor of the National Wildlife Refuge System, on Pelican Island, Florida. By 1909, the Roosevelt administration creates 42 million acres of national forests, 53 national wildlife refuges and 18 areas of "special interest," including the Grand Canyon.

1919 - Kentenia State Forest in Harlan County, today the oldest state-owned forest, is acquired as a gift from the Kentenia-Cantron Corporation. The Kentucky Division of Forestry manages this and six other state forests.

1912 - The Kentucky Legislature formed the Kentucky Division of Forestry, whose mission is to protect and enhance the forest resources of the Commonwealth through a public informed of the environmental and economic importance of these resources.

1905 - The United States Forest Service is established within the Department of Agriculture to manage forest reserves.

1904-1905 - The American Chestnut Blight, a lethal fungus first discovered in 1904 in New York City, spread quickly. In its wake, it left only dead and dying stems. By 1950, except for the shrubby root sprouts the species continually produces (and which also quickly become infected), the chestnut species on some nine million acres of eastern forests had disappeared.



For more than 70 years,
Kentucky's 121 conservation
districts have been working to conserve and develop
the natural resources of the
Commonwealth. They do it by
helping people plan and use
conservation practices on their land.

Promote Forestry

Conservation districts are subdivisions of Kentucky state government. Each is governed by a seven-member, locally elected board of supervisors. The supervisors plan and carry out conservation programs aimed at helping their communities grow and develop and, at the same time, protect their natural resources.

A variety of conservation methods are practiced

Districts provide conservation plans and technical assistance for management practices that protect soil and water resources. Conservation practices reduce soil erosion that impacts the amount of silt or contaminants entering ponds, lakes or streams.

Forest conservation practices decrease erosion, thus reducing the amount of silt entering ponds, lakes and streams and improving the quality of water for municipal, industrial and agricultural uses.

Put together an Envirothon Team

The Kentucky Association of Conservation Districts, in cooperation with the Kentucky Envirothon Steering Committee, is planning the 11th annual Kentucky Envirothon, to be held in the spring of 2009. The competition will test students on their environmental knowledge in five areas: soils, aquatics, forestry, wildlife and a current environmental issue.

For more information, please contact your local conservation district or call the Division of Conservation at 502-573-3080 or email www.conservation.ky.gov.

Districts educate the public to encourage wise forestry

Conservation district supervisors realize the importance of using the forest and encouraging tree planting and timber stand improvement to ensure future timber resources. The conservation districts are concerned with both large-scale rural forestry and with urban forestry.

Most districts have an intensive education and information program. Some of these activities, in addition to working with the conservation writing and art contests, include programs for school groups, civic organizations and others, and helping the individual landowner plan

and apply sound conservation practices.

For contact information for conservation districts, go to http://www.conservation.ky.gov/condistricts/

Tree Trivia

For every pound of wood a tree grows, it releases about one and one-half pounds of oxygen.